



The Approaches Taken by Family Physicians in Turkey Regarding Prostate Patients and Prostate Specific Antigen

Türkiye'deki Aile Hekimlerinin Prostat Hastalarına ve Prostat Spesifik Antijene Yaklaşımları

Prostate and the Family Physicians

Alpaslan Akbaş¹, Murat Tekin², Levent Verim³, Murat Tolga Gulpınar¹, Eyüp Burak Sancak¹, Yusuf Haydar Ertekin², Aysegul Uludag², Berkan Resorlu¹

¹Üroloji Anabilim Dalı, Çanakkale Onsekiz Mart Üniversitesi, Tıp Fakültesi, Çanakkale,

²Aile Hekimliği Anabilim Dalı, Çanakkale Onsekiz Mart Üniversitesi, Tıp Fakültesi, Çanakkale,

³Üroloji Kliniği, Haydarpaşa Numune Eğitim ve Araştırma Hastanesi, İstanbul, Türkiye

Çalışma 20-24 Ekim 2015 tarihleri arasında 24. Ulusal Üroloji Kongresi İzmir'de poster olarak kabul edilmiştir.

Özet

Amaç: Bu çalışmada aile hekimlerinin, alt üriner sistem semptomlarına (AÜSS) yaklaşımları, total and serbest prostat spesifik antijen (tPSA ve sPSA) konusundaki klinik uygulamaları sorgulanmıştır. **Gereç ve Yöntem:** İnternet üzerinden çevrimiçi olarak hazırlanan bir anketin linki, aile hekimleri elektronik posta grubuna gönderildi. Toplam 14 sorudan oluşan ankette kimlik bilgilerine yer verilmeyip, AÜSS'ü olan erkek hastalara yaklaşımları sorgulandı. Bazı sorular çoktan seçmeli bazıları ise birden fazla seçeneğin işaretlenebileceği türden idi. Sonuçlar grafik haline getirilerek yorumlandı. **Bulgular:** 350 aile hekimi ankete online olarak yanıt verdi. 250'si (%72) aile hekimi asistanı veya uzmanı olan katılımcıların 214'ü (%61) aile sağlığı merkezlerinde çalışmakta idi. AÜSS'ü olan erkek hasta gören 300 (%85) hekimden sadece 64 tanesi (%20) prostat muayenesi yaptığını ifade etti. 298 (%99) hekim alfa bloker ilaç yazarken, 234 hekim (%78) tPSA, 134 (%44) hekim ise sPSA istiyor cevabını vermiştir. 134 kişinin 104'ü tPSA değerini göz önüne almadan sPSA istemiştir. **Tartışma:** Aile hekimlerinin AÜSS olan erkeklere yaklaşımları arasında farklılıklar saptanmıştır. DRE'nin çoğu hastaya yapılmadığı ve sPSA'nın lüzumsuz istenmesi gibi sonuçlar ortaya çıkmıştır. Hizmet içi eğitim, bilimsel kongreler gibi etkinlikler ile aile hekimlerinin AÜSS hastalarına yaklaşımlarında farkındalıklarının artırılması sağlanabilir.

Anahtar Kelimeler

Alt Üriner Sistem Semptomları; Hekim; Aile; Prostat; Prostat Spesifik Antijen

Abstract

Aim: This survey study questioned family physicians about their approaches to lower urinary tract symptoms (LUTS) and about the clinical application of total and free prostate-specific antigens (tPSA and fPSA). **Material and Method:** The survey link was prepared online and sent to an email group for family physicians. The survey had 14 questions, none of which identified the respondents, concerning approaches to male patients with LUTS. Some questions were multiple choice and others allowed multiple answers to be chosen. The results were graphed and interpreted. **Results:** A total of 350 family physicians responded online. While 250 (72%) were family physician assistants or experts, 214 (61%) worked in family health centers. Of the 300 (85%) family physicians who had seen male patients with LUTS, only 64 (20%) stated that they performed a prostate examination. While 298 (99%) of the physicians prescribed alpha blockers, 234 (78%) physicians stated they requested a tPSA, and 134 (44%) answered that they requested an fPSA. Of the 134 physicians, 104 requested an fPSA without regard to the tPSA value. **Discussion:** The study identified differences in the approaches of family physicians to male patients with LUTS. DRE was not performed for the majority of patients and, as a result, unnecessary requests for fPSA were made. Increased awareness of approaches to LUTS patients can be provided for family physicians at events such as in-service training and scientific congresses.

Keywords

Lower Urinary Tract Symptoms; Physicians; Family; Prostate; Prostate Specific Antigen

DOI: 10.4328/JCAM.4156

Received: 29.11.2015 Accepted: 30.12.2015 Printed: 01.07.2016

J Clin Anal Med 2016;7(4): 462-5

Corresponding Author: Alpaslan Akbaş, Department of Urology, Çanakkale Onsekiz Mart University, Faculty of Medicine, Çanakkale, Turkey.

GSM: +905469363711 F.: +90 2862635957 E-Mail: alpaslanakbas@comu.edu.tr

Introduction

Lower urinary tract symptoms (LUTS) may occur linked to prostate problems in males, especially those of advanced age. The most common problems are benign prostate hypertrophy, prostatitis, and prostate cancer (PCa). As PCa does not produce symptoms in the early period, it can only be diagnosed by examination and screening methods. The most common evaluation method in routine practice is prostate specific antigen (PSA) and digital rectal examination (DRE). Patients are nervous about prostate examinations and if they have no complaints are reluctant to attend physicians. Most of the time, physicians do not perform digital rectal examinations for a variety of reasons. However, in 18% of patients with prostate cancer, diagnosis is made after a palpable mass is found upon digital rectal examination regardless of PSA [1]. Additionally, in situations where cancer diagnosis is provided by DRE, the chances of encountering more aggressive tumors with high Gleason score increases [2].

The common use of PSA has increased the incidence of diagnosis and has clearly reduced metastasis and death linked to prostate cancer. However, unnecessary requests for PSA may cause overdiagnosis and overtreatment leading to financial load, wasted time, and increased work load. However, if the PSA is not requested when necessary, the organ-limited cancer may spread and cause increased morbidity and mortality. Currently, according to published guidelines, the decision for PSA screening should be made through shared decision-making between clinicians and patients [3,4].

Routine application of PSA is performed in two forms in the laboratory: total PSA (tPSA) and free PSA (fPSA). In situations where tPSA is 4-10 ng/ml, the f/t PSA ratio is evaluated and if this ratio is below 0.10, the probability of cancer being identified by biopsy is 56% [5].

Currently, for lower urinary tract symptoms, patients in remote villages are more likely to apply to family physicians who reach their villages than to specialists. This survey study questioned family physicians about approaches to lower urinary tract diseases, and the clinical application of tPSA and fPSA.

Material and Method

When preparing the survey, care was taken that questions and answers be short and easily understood. The approach of family physicians to male patients with LUTS was assessed. The survey was not designed to measure the physicians' knowledge but, instead, to determine their attitude in practical application. Questbase, an online survey preparation program, was used to prepare a website and the link was sent to an electronic mail group for family physicians.

The age, name, and gender of physicians were not questioned. In addition to personal information, such as years of experience, whether working as a family physician or practitioner, health organization worked for, and training hospital where specialization was studied, approaches to prostate patients were questioned. Questions included how many male patients with LUTS are seen per month, whether digital rectal examination is performed or not, whether total PSA and free PSA tests are requested, and if so, in which situations, and age at which PSA is first requested. Additional questions were whether total and

free PSA are requested together or not, and for which value of total PSA free PSA is requested. A note section was left at the end of the survey where recommendations could be added. The majority of questions only allowed a single choice answer, while a few questions allowed more than one answer to be chosen.

Results

To meet the recommendations, the survey was revised 25 times. A total of 350 family physicians in 42 cities fully completed the survey. The mean time to complete the survey by participants was identified as 6 minutes [3-10]. The mean years of experience were 12.7 years (ranging from 1-34 years). While 96 participants had more than 20 years of experience, 154 participants had been working as physicians for fewer than 10 years (Table). Of family physicians participating in the survey, more than 60% worked in FHCs, with the remaining physicians working in second and third stage hospitals.

Table. Demographic data of physicians participating in the survey. 1 Family Health Center, 2 Training and Research Hospital

	N(%)
Place of Employment of Family Physician	
F.H.C. 1	214(61)
State Hospital	36(10)
T.R.H.2	38(11)
University Hospital	62(18)
Specialization	
Practitioner	100(28)
Family Physician	250(72)
Training Hospital for Specialization	
University	50(14)
T.R.H. 2	148(43)
Family Physician Assistant	52(15)
Practitioner	100(28)
Years of Experience	
Between 0-10 years	172(49)
Between 11-20 years	110(32)
More than 20 years	68(19)

As 50 physicians (14%) had not encountered a male patient with LUTS, they were excluded from the study. The remaining 300 physicians reported examining between 1 and 100 male patients with prostatism symptoms in clinic each month. How-

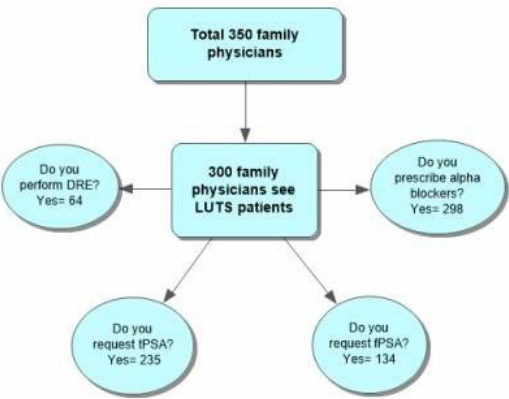


Figure 1. Some questions asked to three hundred and fifty family physicians and numbers answering yes

ever, only 64 physicians (20%) were found to perform digital rectal examination (DRE) (Figure 1). The majority of family physicians participating in the study reported prescribing alpha blocker medications to LUTS patients. While the number of physicians renewing prescriptions they did not initiate was 178 (56%), the number initiating the medication was 120 (37.7%). It appeared that 20 (6.3%) physicians have never prescribed alpha blocker medication. In answer to the question of whether they request tPSA tests for their patients, 36 stated they never requested it. Thirty physicians worked at centers where tPSA was not examined. In answer to the question with multiple answers possible, “When do you request total PSA tests?” the most frequent answer given was “for patients describing LUTS” (198). The other frequently chosen answers were “for check-up” (162), “when the patients request it” (132), “if there is previous prostate disease described” (112), and “if I’m considering metastasis” (40) (Figure 2).

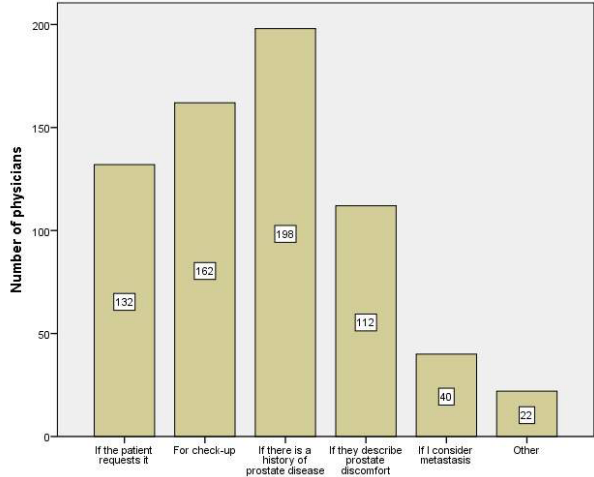


Figure 2. In which situations do you request PSA?

The most frequently chosen answers to the question of the age at which tPSA is first requested were given as 40 and 50 years. In answer to the question of whether fPSA is requested for patients, 134 (42%) stated they do request it. A variety of answers were given to the question of which value of tPSA leads to a request for fPSA. While 58 individuals requested free and total PSA together at the first application of the patient, 44 people chose “within the interval 4-10” and the same number chose “outside the interval 4-10.” Sixty physicians stated they did not request fPSA but transferred the patient to a urologist (Figure 3).

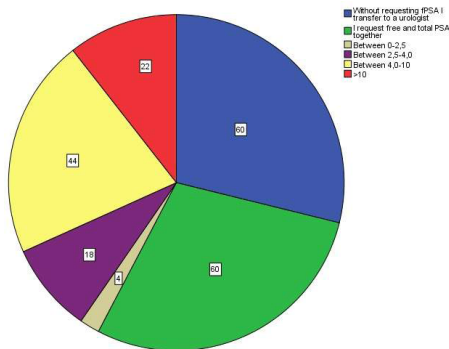


Figure 3. For what value of total PSA do you request free PSA?

Discussion

Prostate cancer is a disease with a high chance of early diagnosis and removal before functional losses develop. In Europe it is the most common cancer type observed in males [6]. Currently, the globally routine serum PSA and a 1-minute rectal prostate examination allow the possibility of discovering early stage tumors and have led to a clear decline in deaths linked to prostate cancer. As prostate cancers are normally localized in the peripheral zone, DRE is very important for cancer diagnosis. As palpable masses on rectal examinations can result in high Gleason scores, they are a clear indication for prostate biopsy [7]. Of participants in the survey, 85% had seen male patients with lower urinary tract symptoms and stated they prescribed alpha blockers; however, only 1 in 5 stated they performed digital rectal examinations. The low rate of rectal examinations reduces the probability of diagnosing clinically significant prostate cancers. In addition, DRE may be neglected even by urology experts under busy clinic conditions. Some patients and physicians do not like this type of examination, and social drawbacks may cause this examination, important for PCa diagnosis, not to be performed. According to the European Association of Urology PCa guidelines, renewed in 2015, males above 45 years of age with family history and those above 50 years without history, those above 40 years with 1 ng/ml PSA and those above 60 with PSA above 2 ng/ml carry high risk and are candidates for PSA screening [8-9]. The majority of survey participants routinely requested PSA tests for those above 40 and 50 years. However, a wide range of results were found for the age group at which PSA should first be requested. It is known that the fPSA to tPSA ratio is a marker for clinically distinguishing prostate cancer from BPH [5]. However, it was observed that family physicians displayed different approaches to this topic. The numbers who requested free PSA without seeing the tPSA results were in the majority, whereas it is necessary to assess this rate for patients with tPSA from 4-10 ng/ml. The emphasis on first stage treatment, including the work of family health centers (FHC) and public health authorities who have recently acknowledged the importance of early diagnosis, has increased the rate of progress toward preventive medicine. The emphasis on first stage treatment, including the work of family health centers (FHC) and public health authorities who have recently acknowledged the importance of early diagnosis, has increased the rate of progress toward preventive medicine. The Cancer Early Diagnosis, Screening and Training Center (CEDSTC), linked to the public health authority, has made intensive efforts in the fight against cancer. Mobile mammography devices are carried to neighborhoods for breast cancer screening of menopausal women, stool samples from those above 60 in FHC are examined for hidden blood for colon cancer screening, and PAP smears are taken from women aged 15-49 years for cervical cancer screening by CEDSTC. Thus awareness of cancer in individuals is increasing and the chances of developing cancer in advanced years may be reduced by healthy living. However, there is no routine application at first stage health centers for early diagnosis of prostate cancer. Due to this survey, some participants stated that their awareness of LUTS evaluation had increased.

According to the results of this survey, there are large differences between family physicians in terms of approaches to LUTS patients. The lack of urology rotations in family physician specialization training programs, the short duration of urology internships in undergraduate training, lack of training on these topics after graduation, and busy clinic conditions are reasons underlying these differences. Additionally, in our country, social drawbacks, worries about neglect and function loss, and delays in applying to doctors lead to evasion of the benefits of early diagnosis and modern treatment methods.

One of the most important limitations of the survey is that a larger number of participants was not reached. The most important reason for this is that in daily practice physicians do not have time to answer the large number of surveys that they receive. Not prioritizing surveys received, delays, and being missed among email traffic may be listed as other reasons.

Patients deal with check-ups for many health problems with their family physician and do not attend higher-stage facilities for a variety of reasons. The majority of people applying for check-ups at family physicians do not know that prostate cancer screening is not routinely performed. This further increases the responsibility of family physicians.

Competing interests

The authors declare that they have no competing interests.

References

1. Richie JP, Catalona WJ, Ahmann FR, M'Liss AH, Scardino PT, Flanigan RC, deKernion JB, Ratliff TL, Kavoussi LR, Dalkin BL, Waters WB, MacFarlane MT, Southwick PC. Effect of patient age on early detection of prostate cancer with serum prostate-specific antigen and digital rectal examination. *Urology* 1993;42(4):365-74.
2. Okotie OT, Roehl KA, Han M, Loeb S, Gashti SN, Catalona WJ. Characteristics of prostate cancer detected by digital rectal examination only. *Urology* 2007;70(6):1117-20.
3. Carter HB, Albertsen PC, Barry MJ, Etzioni R, Freedland SJ, Greene KL, Holmberg L, Kantoff P, Konety BR, Murad MH, Penson DF, Zietman AL. Early detection of prostate cancer: AUA Guideline. *J Urol* 2013;190(2):419-26.
4. Qaseem A, Barry MJ, Denberg TD, Owens DK, Shekelle P. Screening for prostate cancer: a guidance statement from the clinical guidelines committee of the American College of Physicians. *Ann Intern Med* 2013;158(10):761-9.
5. Catalona WJ, Partin AW, Slawin KM, Brawer MK, Flanigan RC, Patel A, Richie JP, deKernion JB, Walsh PC, Scardino PT, Lange PH, Subong ENP, Parson RE, Gasior GH, Loveland KG, Southwick PC. Use of the percentage of free prostate-specific antigen to enhance differentiation of prostate cancer from benign prostatic disease: a prospective multicenter clinical trial. *JAMA* 1998;279(19):1542-7.
6. Ferlay J, Parkin DM, Steliarova-Foucher E. Estimates of cancer incidence and mortality in Europe in 2008. *Eur J Cancer* 2010;46(4):765-81.
7. Gosselaar C, Roebol MJ, Roemeling S, Schröder FH. The role of the digital rectal examination in subsequent screening visits in the European randomized study of screening for prostate cancer (ERSPC), Rotterdam. *Eur Urol* 2008;54(3):581-8.
8. Vickers AJ, Ulmert D, Sjöberg DD, Bennette CJ, Björk T, Gerdtsson A, Manjer J, Nilsson PM, Dahlin A, Bjartell A, Scardino PT, Lilja H. Strategy for detection of prostate cancer based on relation between prostate specific antigen at age 40-55 and long term risk of metastasis: case-control study. *BMJ* 2013; DOI: 10.1136/bmj.f2023.
9. Carlsson S, Assel M, Sjöberg D, Ulmert D, Hugosson J, Lilja H, Vickers A. Influence of blood prostate specific antigen levels at age 60 on benefits and harms of prostate cancer screening: population based cohort study. *BMJ* 2014; 348 DOI:10.1136/bmj.g2296.

How to cite this article:

Akbas A, Tekin M, Verim L, Gulpınar MT, Sancak EB, Ertekin YH, Uludag A, Resorlu B. The Approaches Taken by Family Physicians in Turkey Regarding Prostate Patients And Prostate Specific Antigen. *J Clin Anal Med* 2016;7(4): 462-5.